

# Python Basics & Strings Cheat Sheet by Nouha\_Thabet via cheatography.com/103894/cs/21291/

## Hello World in Python

print( " Hello World! ")

### **Python Comments**

#### Example 1

#This is a comment

#### Example 2

#This is a comment
#written in
#more than just one line

#### Example 3

```
" " " This is a comment written in more than just one line " " "
```

## **Python Variables**

```
x = "How old are you ?" #x is of type str
print(x)
>>> How old are you ?
x = 25 #x now is of type int
print(x)
>>> 25
```

# Python Data Types

Text Type: str

Numeric Types: int, float, complex

Sequence Types: list, tuple, range

Mapping Type: dict

Set Types: set, frozenset

Boolean Type: bool

Binary Types: bytes, bytearray, memoryview

## Get the data type of a variable "var"

type(var)

# Python Data Types Examples

## **Python Casting**

Casting is used to specify a type on to a variable and this is done using constructor functions.

### Examples

## Python Strings

Operations on strings and examples:

#### Multiline strings

```
x = " " This is a
multiline string " " "
```

### Get the character at a specific position

```
x = " Python Progra mmi ng"
print( x[1])  #print character at position 1
>>> y
```

#### Slicing

```
x = " Python Progra mmi ng"
print( x[3:5])
>>> ho
```

## **Negative Indexing**

```
x = " Python Progra mmi ng"
print( x[- 15: -13])
>>> ho
```

## String Length

```
x = " Hel lo"
print( len(x))
>>> 5
```

# Remove any whitespace from the beginning or the end

```
x = " Hello "
print( x.s trip()) #return " Hel lo"
```

#### Return the string in lower case

```
x = Hello
print( x.l ower()) #return " hel lo"
```

## **Python Strings**

Example	Data Type
x = " Co lor "	list
x = 1	int
x = 1.2	float
x = 2j	complex
x = ["Bl ue", "Red", "Ye llow"]	list
x = ("Bl ue", " Red " ,"Ye llo w")	tuple
x = range(8)	range
$x={" Age " :25 ,"He igh t":1.72}$	dict
$x = {"Pi nk", " Red "}$	set
$x = frozen set ({"P ink " ,"Re d"})$	frozenset
x = True	bool
x = b"Co lor "	bytes
x = bytear ray(8)	bytearray
x = memory vie w(b yte s(8))	memoryview

# Get the data type of x:

```
x = " Col or"
print( typ e(x))
>>> str
```

## Return the string in upper case

```
x = Hello
print( x.u pper()) #return " HEL LO"
```

## Replace a string with another string

```
x = " Hel lo"
print( x.r epl ace ("He " ,"A"))  #return " All
```

#### Choose a separator and split string into substrings

```
x = " Python Progra mmi ng"
print( x.s pli t(" ")) # return ['Python' , 'Progr ag']
```

### Check if a string is present in a text

```
txt = " Tunisia is a North African countr y"
x = " Nor th" in txt
print(x) # return True
```

### Concatenation

```
x = " Hel lo"
y = " Wor ld"
z = x + " " + y
print(z) # return " Hello World"
```

## Insert numbers into strings

```
quantity = 3
  itemno = 567
price = 49.95
myorder = "I want {} pieces of item {} for {} dollar
print(myorder.format(quantity, itemno, price))
```



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